

WHAT IS CLAIMED IS:

1. An apparatus for managing software licenses comprising:

means for managing a total number of software licenses owned by an entire organization;

means for collecting inventory information from each of a plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

means for calculating a difference between the number of software licenses owned by the entire organization and a number of software licenses actually in use which is calculated on the basis of the collected inventory information and for outputting information representing an excessive or insufficiency in the number of software licenses or information regarding purchase of additional software licenses.

2. An apparatus for managing software licenses according to Claim 1, further comprising:

means for generating a software dictionary which identifies software during collection of the inventory information;

wherein the means for collecting the inventory information collects the inventory information by using the generated software dictionary which is distributed to each of the plurality of computers in the organization from which the inventory information is collected.

3. An apparatus for managing software licenses

comprising:

means for storing a total number of software licenses owned by an entire organization and a total number of software licenses allotted to each section of the organization;

means for collecting inventory information from each of a plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

means for calculating a difference between the number of software licenses allotted to each section of the organization and a number of software licenses actually used in the section which is calculated on the basis of the collected inventory information and for outputting warning information in a case that the number of software licenses in actual use is greater than the number of allotted software licenses.

4. An apparatus for managing software licenses according to Claim 3, further comprising:

means for generating a software dictionary which identifies software during collection of the inventory information;

wherein the means for collecting the inventory information collects the inventory information by using the generated software dictionary which is distributed to each of the plurality of computers in the organization from which the inventory information is collected.

5. An apparatus for managing software licenses

comprising:

means for managing a total number of software licenses owned by an entire organization and a total number of software licenses allotted to each section of the organization;

means for collecting inventory information from each of a plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

means for calculating a difference between the number of software licenses allotted to each section of the organization and a number of software licenses actually used within the section which is calculated on the basis of the collected inventory information and for outputting information which indicates that the section is allotted an excess number of software licenses compared with the number of software licenses in actual use.

6. An apparatus for managing software licenses according to Claim 5, further comprising:

means for generating a software dictionary which identifies software during collection of the inventory information;

wherein the means for collecting the inventory information collects the inventory information by using the generated software dictionary which is distributed to each of the plurality of computers in the organization from which the inventory information is collected.

7. An apparatus for managing software licenses

comprising:

means for managing a number of software licenses owned by an entire organization;

means for receiving from a higher-level server an organization-wide policy which is information regarding a logic for collection of a usage number of software licenses;

means for generating, on the basis of the organization-wide policy, a software dictionary for identification of software and a license policy used for determination of presence of a license;

means for distributing the software dictionary, over a network, to each of a plurality of computers within the organization in order to collect inventory information from each of the computers, the inventory information including information regarding software actually installed in each computer; and

means for reporting to the higher-level server a usage number of software licenses calculated on the basis of the collected inventory information and the license policy.

8. A method for managing software licenses comprising:

managing a software-license holding number which represents a number of software licenses owned by an entire organization, and managing, for each section of the organization, a software-license right number which represents a total number of software licenses permitted to be used and a software-license usage number which represents a total number of software licenses in actual use;

collecting, over a network, inventory information from each of a plurality of computers within the organization, the

inventory information including information regarding software actually installed in each computer, and updating the software-license usage number of each section of the organization;

in a case that the sum of the software-license usage numbers of all sections of the organization exceeds the software-license holding number, generating a purchase transaction for purchasing software licenses equal in number to a difference between the sum and the software-license holding number;

adding a number of purchased software licenses to the software-license holding number; and

distributing a purchase expense to a section whose software-license usage number is greater than the corresponding software-license right number, and updating the software-license right number of the section.

9. A method for managing software licenses comprising:

managing a software-license holding number which represents a total number of software licenses owned by an entire organization, and managing, for each section of the organization, a software-license right number which represents a total number of software licenses permitted to be used and a software-license usage number which represents a total number of software licenses in actual use;

collecting inventory information from each of a plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer, and updating the software-license usage number of each section of the organization;

in a case that the software-license holding number is greater than the sum of the software-license usage numbers of all sections of the organization, managing, as a software-license nonuse number, a difference between the software-license holding number and the sum; and

in a case that a necessity of purchasing software licenses arises and that a total number of software licenses to be purchased in response to purchase requests from at least one section of the organization is greater than the software-license nonuse number, obtaining an actual number of software licenses to be purchased as the difference between them.

10. A storage medium storing a program for managing software licenses by use of a computer, the program causing the computer to perform processing comprising:

managing a total number of software licenses owned by an entire organization;

collecting inventory information from each of a plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

calculating a difference between the number of software licenses owned by the entire organization and a number of software licenses actually in use which is calculated on the basis of the collected inventory information and for outputting information representing an excessiveness of insufficiency in the number of software licenses or information regarding purchase of additional software licenses.

11. A storage medium storing a program for managing software licenses according to Claim 10, wherein:

the program causing the computer to perform processing further comprising generating a software dictionary which identifies software during collection of the inventory information;

the generated software dictionary is distributed to the plurality of computers in the organization from which the inventory information is collected; and

the inventory information is collected by the means for collecting the inventory information.

12. A storage medium storing a program for managing software licenses by use of a computer, the program causing the computer to perform processing comprising:

managing a total number of software licenses owned by an entire organization and a total number of software licenses allotted to each section of the organization;

collecting inventory information from each of a plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

calculating a difference between the number of software licenses allotted to each section of the organization and a number of software licenses actually used in the section which is calculated on the basis of the collected inventory information and for outputting warning information in a case that the number of allotted software licenses is greater than the number of software licenses in actual use or in a case

that the section is allotted an excess number of software licenses compared with the number of software licenses in actual use.

13. A storage medium storing a program for managing software licenses according to Claim 12, wherein:

the program causing the computer to perform processing further comprising generating a software dictionary which identifies software during collection of the inventory information;

the generated software dictionary is distributed to the plurality of computers in the organization from which the inventory information is collected; and

the inventory information is collected by the means for collecting the inventory information.

14. A storage medium storing a program for managing software licenses by use of a computer, the program causing the computer to perform processing comprising:

managing a number of software licenses owned by an entire organization;

receiving from a higher-level server an organization-wide policy which is information regarding a logic for collection of a usage number of software licenses;

generating, on the basis of the organization-wide policy, a software dictionary for identification of software and a license policy used for determination of presence of a license;

distributing the software dictionary to each of a plurality of computers within the organization in order to



collect inventory information from each of the computers, the inventory information including information regarding software actually installed in each computer; and

reporting to the higher-level server a usage number of software licenses calculated on the basis of the collected inventory information and the license policy.

15. A storage medium storing a program for managing software licenses by use of a computer, the program causing the computer to perform processing comprising:

managing a software-license holding number which represents a number of software licenses owned by an entire organization, and managing, for each section of the organization, a software-license right number which represents a total number of software licenses permitted to be used and a software-license usage number which represents a total number of software licenses in actual use;

collecting inventory information from each of a plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer, and updating the software-license usage number of each section of the organization;

in a case that the sum of the software-license usage numbers of all sections of the organization exceeds the software-license holding number, generating a purchase transaction for purchasing software licenses equal in number to a difference between the sum and the software-license holding number;

adding a number of purchased software licenses to the software-license holding number; and

distributing a purchase expense to a section whose software-license usage number is greater than the corresponding software-license purchase number, and updating the software-license right number of the section.

16. An apparatus for managing software licenses in an organization having a plurality of computers, the apparatus comprising:

a unit managing a total number of software licenses owned by the entire organization;

a unit collecting inventory information from each of the plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

a unit calculating a difference between the number of software licenses owned by the entire organization and a number of software licenses actually in use which is calculated on the basis of the collected inventory information, and outputting information representing an excessive or insufficiency in the number of software licenses or information regarding purchase of additional software licenses.

17. An apparatus for managing software licenses in an organization having a plurality of computers, the apparatus comprising:

a unit managing a total number of software licenses owned by the entire organization and a total number of software licenses allotted to each section of the organization;

a unit collecting inventory information from each of the plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

a unit calculating a difference between the number of software licenses allotted to each section of the organization and a number of software licenses actually used in the section which is calculated on the basis of the collected inventory information, and outputting warning information in a case that the number of software licenses in actual use is greater than the number of allotted software licenses.

18. An apparatus for managing software licenses in an organization having a plurality of computers, the apparatus comprising:

a unit managing a total number of software licenses owned by the entire organization and a total number of software licenses allotted to each section of the organization;

a unit collecting inventory information from each of the plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

a unit calculating a difference between the number of software licenses allotted to each section of the organization and a number of software licenses actually used within the section which is calculated on the basis of the collected inventory information, and outputting information which indicates that the section is allotted an excess number

of software licenses compared with the number of software licenses in actual use.

19. An apparatus for managing software licenses in an organization having a plurality of computers, the apparatus comprising:

a unit managing a number of software licenses owned by the entire organization;

a unit receiving from a higher-level server an organization-wide policy which is information regarding a logic for collection of a usage number of software licenses;

a unit generating, on the basis of the organization-wide policy, a software dictionary for identification of software and a license policy used for determination of presence of a license;

a unit distributing the software dictionary, over a network, to each of the plurality of computers within the organization in order to collect inventory information from each of the computers, the inventory information including information regarding software actually installed in each computer; and

a unit reporting to the higher-level server a usage number of software licenses calculated on the basis of the collected inventory information and the license policy.

20. An apparatus for managing software licenses comprising:

a managing unit managing a total number of software licenses owned by an organization having a plurality of computers;

a collecting unit collecting inventory information from each of the plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

a calculating unit calculating a difference between the number of software licenses owned by the entire organization and a number of software licenses actually in use which is calculated on the basis of the collected inventory information.

21. An apparatus for managing software licenses according to Claim 20, wherein the calculating unit outputs an information which is decided according to the calculation.

22. An apparatus for managing software licenses according to Claim 20, wherein the calculating unit displays a screen of a state of usage of software licenses, the screen including a hierarchy of the organization displayed in the form of a tree and the state of usage of software licenses within each selected section within the hierarchy, and the state of usage of software licenses including the number of software licenses allotted to the selected section and a number of software licenses actually in use at the selected section which is calculated on the basis of the collected inventory information.

23. An apparatus for managing software licenses comprising:

a network;

a plurality of computers being within an organization

and connected by the network in the form of a hierarchy;

a managing unit provided in a higher-level computer in the hierarchy and managing at least a number of software licenses allotted to each section of the organization;

a collecting unit provided in the higher-level computer and collecting inventory information from each of the plurality of computers within the organization, the inventory information including information regarding software actually installed in each computer; and

a calculating unit provided in the higher-level computer and calculating a difference between the number of software licenses allotted to each section of the organization and a number of software licenses actually in use at the each section which is calculated on the basis of the collected inventory information.

24. An apparatus for managing software licenses according to Claim 23, wherein the managing unit has a data base provided in the higher-level computer and storing the total number of software licenses allotted to each section of the organization and the collected inventory information from each of the plurality of computers.

25. An apparatus for managing software licenses according to Claim 23, further comprising:

a higher-level server connected to the higher-level computer, distributing a software contents and issuing license certificates.

26. An apparatus for managing software licenses

according to Claim 25, wherein:

the higher-level server distributes to the higher-level computer an organization-wide policy which is information regarding a logic for collection of a usage number of software licenses;

the higher-level computer generates, on the basis of the organization-wide policy, a software dictionary for identification of software and a license policy used for determination of presence of a license, and distributes the software dictionary to each of the plurality of computers;

each of the plurality of computers send to the higher-level computer the inventory information including information regarding software actually installed in each computer; and

the higher-level computer reports to the higher-level server license inventory which is calculated on the basis of the collected inventory information and the license policy.